## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A2CE Revision 7 **CESSNA** 336 March 31, 2003

### TYPE CERTIFICATE DATA SHEET NO. A2CE

This data sheet which is part of Type Certificate No. A2CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Cessna Aircraft Company Type Certificate Holder

P. O. Box 7704

Wichita, Kansas 67277

# I - Model 336, Skymaster, 4 PCLM (Normal Category), Approved May 22, 1962

Two Continental IO-360-A **Engines** 

Rated 210 BHP Takeoff, and 195 BHP Maximum Continuous

Fuel \*100/130 minimum grade aviation gasoline (See Note 3)

(See NOTE 5 for alcohol-based fuels warning.)

\*Rating, standard atmosphere Engine limits

Maximum continuous r.p.m., and in. Hg. at

Critical altitude (2,250 ft.) 2800 r.p.m. and 26.2 in. Hg. 2800 r.p.m. and 26.5 in. Hg. Sea level Takeoff (5 min. limit), 2800 r.p.m. (Full Throttle)

Propeller and propeller limits McCauley constant speed full-feathering installation

(a) (Front) McCauley D2AF34C46/76C or D2AF34C60/76C 56 lb. (+24.5)

Diameter: not over 76 in., not under 74.5 in.

No further reduction permitted

Pitch settings at 30" sta.: 11.7 Deg. low, 79.0 Deg. feather

(b) (Rear) McCauley D2AF34C56/L76C or D2AF34C61/L76C 57 lb. (+231)

Diameter: not over 76 in., not under 74.5 in.

No further reduction permitted

Pitch settings at 30" sta.: 10.8 Deg. low, 79.0 Deg. feather 11 lb. (+224)

(c) (Rear) Cooling fan Cessna 1457210

(d) (Front) Woodward hydraulic governor

210443 or A210471 4 lb. (+31)

(e) (Rear) Woodward hydraulic governor

210443 or A210471 4 lb. (+220)

(f) (Front) Cessna spinner 1457300 3 lb. (+24.5) (g) (Rear) Cessna spinner 1457300 3 lb. (+231)

(h) (Front) Cessna spinner 1457306 (Alternate 2 lb. (+24.5)

(Rear) Cessna spinner 1457306 (Alternate) 2 lb. (+231)

Airspeed limits (CAS) 212 mph. (184 knots) \*Never exceed

> \*Maximum structural cruising 180 mph. (156 knots) \*Flaps extended 120 mph. (104 knots) \*Maneuvering 145 mph. (126 knots)

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## I - Model 336 (cont'd)

C.G. Range (Landing Gear Extended) [See NOTE 4.]

Forward Limits: Linear variation from 138.8 in. aft of datum at 3,900 lb. to 136.4 in. aft of

datum at 3,000 lb.; 136.4 in. aft of datum at 3,000 lb. or less.

Aft Limits: 140.7 in. aft of datum at 3,900 lb. or less.

Empty wt. C.G. range None

Datum 65.0 forward of front face of front firewall

Leveling means Upper edge of front seat track

Maximum weight 3,900 lb.

No. of seats 4 (2 at sta. +102; 2 at sta. +143)

Maximum baggage 365 lb. (Reference weight and balance for additional information)

[See NOTE 4.]

92 gal. usable (2 tanks, 46 gal. ea. at +150) Fuel capacity

10 qt. - front (+43.5) (7 qt. usable) Oil capacity

10 qt. - rear (+207.5)(7 qt. usable)

See Note 1 for data on system oil and fuel

Control surface Wing flaps Down 30 Deg. movements

Aileron Down Up 21 Deg 15 Deg. Elevator Down Up 26 Deg 20 Deg. Elevator tab Up 10 Deg. Down 26 Deg.

> Rudder(measured parallel to 0.0.W.L.) Inboard 15 Deg. Outboard 22 Deg.

Serial Nos. eligible 633, 636, 336-0001 through 336-0195

#### **Data Pertinent to All Models**

Certification basis CAR 3 dated May 15, 1956, and Amendments 3-1 through 3-5.

Type Certificate No. A2CE issued May 22, 1962.

Application for Type Certificate dated February 23, 1960.

Type Certificate issued and the DMCR authorized to issue airworthiness certificates under the delegation option provisions of Part 410 of the

Regulations of the Administrator.

Production basis Production Certificate No. 4

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations

(see Certification Basis) must be installed in the aircraft for certification. In

addition, the following item of equipment is required:

Stall warning indicator, Cessna Drawing 0511062-9

NOTE 1. Current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certified empty weight and corresponding center of gravity location must include system oil of 11 lb. at

(+125.5) and unusable fuel of 5 lb. at (+159.5) with standard wing fuel tanks.

NOTE 2. (a) The following placards must be displayed in full view of the pilot: A2CE Page 3 of 3

(1) "This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings, and manuals."

- (2) "No acrobatic maneuvers, including spins, approved."
- (3) "Maximum maneuvering speed 145 m.p.h. CAS."
- (4) "Maximum design weight 3,900 lb."
- (5) "Maximum flight maneuvering load factors: Flaps up +3.8 to -1.52

Flaps down +2.0"

- (6) "Maximum altitude loss in stall recovery 140 feet."
- (7) "Maximum flap extension speed

10 Deg. -160 m.p.h., CAS 10 Deg. - 30 Deg. -120 m.p.h., CAS"

(b) The following placard must be installed on the control lock: "Control lock - Remove before starting engines."

(c) The following placards must be displayed on the baggage door:
"Maximum capacity 365 lb. For additional loading instructions, see Weight and
Balance data;" and "CAUTION – AFT CENTER OF GRAVITY LIMITATION
MAY RESTRICT LOADING OF THIS COMPARTMENT TO LESS THAN 365
POUNDS." [See NOTE 4.]

(d) The following placard must be installed on the fuel selector cover:

 "Front Engine
 Rear Engine

 Off
 Off

 Left Main
 46.0 Gal.
 Right Main
 46.0 Gal.

 Right Main
 46.0 Gal.
 Left Main
 46.0 Gal.

- (e) The following placard must be installed near fuel selector:"Takeoff and landing Front engine, Left main Rear Engine, Right main."
- (f) The following placard must be installed near propeller control: To feather, pull prop control through detent."
- (g) The following placard must be installed on lower right corner of flight panel: With inoperative engine, feather propeller."
- (h) The following placard must be installed adjacent to the fuel filler caps: "Tank Capacity 46.4 U.S. Gallons 100/130 minimum grade."
- NOTE 3. 1%, by volume, isopropyl alcohol approved for use as fuel anti-icing additive when used as outlined in Cessna Service Letter ME73-25 dated November 2, 1973, or subsequent revisions.

In addition to the above placards, the prescribed operating limitations indicated by (\*) under Section I must be displayed by permanent markings, placards, or reports (Weight and Balance Data).

NOTE 4. FAA Airworthiness Directive AD 78-16-04, issued October 14, 1978, affects all Model 336 airplanes and imposed more restrictive aft center of gravity limits.

NOTE 5

**"WARNING:** Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes."

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